Your complete abstract, including graphs and tables, must fit in the 7" x 4 ¾" box below or we cannot accept it. The box does not have to be included in your submission, but all text, tables and graphics must still be able to fit into the 7" x 4 ¾" space. Please make sure the font size is large enough to read. If it can't be read, it can't be judged.

Pelvic Floor Muscle Function in Women with Prolapse

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Objective: To explore relationships between pelvic floor muscle (PFM) function and pelvic organ prolapse (POP) in women seeking surgery for prolapse.
Methods: This analysis used preoperative data from 229 women enrolled in the Colpopexy and Urinary Reduction Efforts (CARE) trial. Enrollment criteria included women with prolapse, without symptoms of stress urinary incontinence, planning abdominal sacral colpopexy. Pre-operative measures of digital PFM strength (Brink score) and POP quantification (POP-Q) were obtained. The Brink score assigns 1-4 points each for 3 qualities (pressure, duration, and displacement) assessed at digital vaginal examination during voluntary pelvic muscle contraction, for a maximal total score of 12. The Pelvic Floor Distress Inventory (PFDI) and Pelvic Floor Impact Questionnaire (PFIQ) measured symptoms, distress, and life impact. Subjects were grouped based on their Brink score into lowest (3-6) and highest (10-12) quartiles. Age, POP-Q, PFDI and PFIQ scores were compared between the low and high Brink quartiles. Means ±SD are reported.
Results: The 229 women had a mean age of 62 ±10 years. Prolapse was Stage II in 27 (12%) women, Stage III in 156 (68%), and Stage IV in 46 (20%). Women with high Brink scores (n = 52) were younger (60.2 ±8.6 versus 64.9 ±9.1 years, p = 0.014), had lower genital hiatus measures without strain (3.9 ±1.4 versus 4.9 ±1.9 cm, p = 0.005) and with strain (4.9 ±1.4 versus 6.1 ±1.9 cm, p = 0.011), and reported less life impact of urinary symptoms (UIQ score = 37.2 ±6.8 versus 47.3 ±7.1 points, p = 0.046) than women with low Brink scores (n = 39). The negative association between Brink score and genital hiatus persisted after adjusting for age. The Brink score and 2 of its 3 components (pressure and displacement) were negatively correlated with genital hiatus size with or without strain (range -0.20 to -0.27, p < .01).
Conclusions: The Brink score, an estimate of pelvic muscle function, is negatively associated with genital hiatus.

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